Page 7

#### **REMARKS**

Claims 1-5 and 9-22 are pending in the application. Claims 1-5 have been rejected. Claims 9-22 have not been addressed by the Office Action. Claim 4 has been amended for clarity. Reconsideration of the application is respectfully requested in view of the comments below.

It is noted that a preliminary amendment dated September 23, 2004 was filed that canceled claims 6-8 and added claims 9-22. The preliminary amendment dated September 23, 2004 was filed with the response to the notice to file missing parts. Examination of claims 9-22 is respectfully requested.

# I. CLAIM OBJECTIONS

Claims 7 and 8 were objected to as being in improper form. It is noted that claims 7 and 8 were canceled in the preliminary amendment dated September 23, 2004. Accordingly, withdrawal of this objection is respectfully requested.

# II. REJECTION OF CLAIMS 1-6 UNDER 35 U.S.C. §102(a)

Claims 1-6 are rejected under 35 U.S.C. § 102(a) as being anticipated by Gregorius (2004/0165719). Withdrawal of the rejection is respectfully requested for at least the following reasons. It is respectfully noted that claim 6 was canceled in the preliminary amendment dated September 23, 2004.

For a claim to be anticipated by a reference, the reference must teach every element of the claim. Gregorius fails to teach every element of claims 1-5, as shown below, and fails to anticipate claims 1-5 as a result.

Gregorius shows a line driver with a voltage-to-current converter. (See, Figs. 2 and 3). The line driver is in the form of a controllable current source. (Paragraph 44). The line driver comprises two signal inputs which are coupled to a transconductance amplifier OTA1 and two transistors MN1 and MN1' with gates coupled to output terminals of the amplifier OTA1. (Paragraph 45). The task of the transconductance amplifier OTA1 is to regulate the voltage present on the node K1 and K1' to the voltage

Serial No. 10/826,670

Page 8

VSGND present on the node K4 by varying potentials at the gates of MN1 and MN1' via outputs of OTA1. (Paragraph 48). An additional input (+) of the amplifier OTA1 is connected to a unit OPC for DC operating point adjustment. The DC operating point is adjusted and regulated by voltage-controlled current sources VCCS1 and VCCS1'. (Paragraph 50). The adjustment of the quiescent current through the external load is based on a constant current source IREF connected to the unit OPC. (Paragraph 50).

Gregorius fails to teach a method wherein an envelope of the signal applied on the input side is determined, as in claim 1.

Claim 1 is directed to a method for controlling an output signal of a voltage-current converting device. The method comprises setting a reference voltage, and determining an envelope of the differential voltage signal. The reference voltage is then altered based on the determined envelope. The Office Action fails to suggest or show how Gregorius teaches determining the envelope. The envelope, as defined in the specification, is a measure of the maximum amplitude of the voltage at the input I and IX at this point in time. (Page 6, lines 10-15). Similarly, Gregorius also fails to teach altering the reference voltage in a manner dependent on the envelope.

Furthermore, Gregorius fails to teach a method wherein a reference voltage is set for the purpose of setting an output quiescent current, as in claim 1. As stated above, Gregorius employs the constant current source IREF to adjust the quiescent current (Paragraph 50) instead of a reference voltage dependent on an envelope as in claim 1. Therefore claim 1 is not anticipated by the cited reference.

Claims 2-3 depend from claim 1 and are not anticipated by Gregorius for at least the above reasons. Accordingly, withdrawal of the rejection is respectfully requested.

Serial No. 10/826,670

Page 9

Claim 4 recites a setting device coupled to the reference input for feeding in a regulating voltage depending on a determined envelope of an amplitude-modulated signal at the input, which is not taught by Gregorius.

As stated above, Gregorius fails to teach determining an envelope of an amplitude-modulated signal. The envelope, as defined in the specification, is a measure of the maximum amplitude of the voltage at the input I and IX at this point in time. (Page 6, lines 10-15). Additionally, Gregorius fails to teach a setting device that determines the envelope and feeds a regulating voltage depending upon the envelope. Claim 5 depends from claim 4 and is allowable for at least the above reason. Consequently, the cited reference fails to anticipate the invention of claims 4 and 5, and withdrawal of the rejection is respectfully requested.

### III. REJECTION OF CLAIMS 1-6 UNDER 35 U.S.C. §102(b)

Claims 1-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by DeGuelle (US 5,216,354). Withdrawal of the rejection is respectfully requested for at least the following reasons. It is respectfully noted that claim 6 was canceled in the preliminary amendment dated September 23, 2004.

For a claim to be anticipated by a reference, the reference must teach every element of the claim. DeGuelle fails to teach every element of claims 1-5.

DeGuelle shows a controllable voltage-to-current converter that comprises operational amplifiers and transistors acting as controlled signal resistors. (Fig. 3). Control voltages for gate and source electrodes of the transistors are provided by a separate control circuitry. (Column 6, lines 26-29). In the control circuitry, the bulk voltage is controlled in response to an adjustable gate voltage. In DeGuelle, the reference voltages for the gate and bulk are always dependent on the values of the transistor parameters. (Column 65, lines 49-50).

DeGuelle does not teach a method wherein an envelope of the signal applied on the input side is determined, as in claim 1. The Office Action fails to even suggest that DeGuelle teaches envelope detection. Additionally, claim 1 recites wherein a reference

voltage is set for the purpose of setting an output quiescent current, which DeGuelle fails to teach. DeGuelle merely employs an arbitrary reference voltage to which voltages Vs, Vd, Vg, and Vb are defined in relation thereto. (Column 4, lines 47-65). Claims 2-3 depend from claim 1 and are also not anticipated by DeGuelle for at least the above reasons.

Claim 4 recites a setting device (DE) not taught by DeGuelle. The setting device can determine an envelope and feed in a regulating voltage dependent on the envelope, which is also not taught by DeGuelle. The amplifiers of DeGuelle do not even show a reference input for controlling an output voltage or current. (Fig. 3). Claim 5 depends from claim 4 and is not anticipated by DeGuelle for at least the above reasons. Accordingly, withdrawal of this rejection of claims 1-5 is respectfully requested.

#### IV. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application; the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, EHFP152US.

Respectfully submitted, ESCHWEILER & ASSOCIATES. LLC

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**CERTIFICATE OF MAILING (37 CFR 1.8a)** 

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: March 17, 2006

Christine Gillroy
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